#### § 1048.125

- (d) Limited applicability. You may deny warranty claims under this section if the operator caused the problem through improper maintenance or use, as described in 40 CFR 1068.115.
- (e) Owners manual. Describe in the owners manual the emission-related warranty provisions from this section that apply to the engine.

[70 FR 40467, July 13, 2005, as amended at 73 FR 59233, Oct. 8, 2008; 75 FR 23021, Apr. 30, 2010]

## § 1048.125 What maintenance instructions must I give to buyers?

Give the ultimate purchaser of each new nonroad engine written instructions for properly maintaining and using the engine, including the emission-control system. The maintenance instructions also apply to service accumulation on your emission-data engines, as described in 40 CFR part 1065.

- (a) Critical emission-related maintenance. Critical emission-related maintenance includes any adjustment, cleaning, repair, or replacement of critical emission-related components. This may also include additional emission-related maintenance that you determine is critical if we approve it in advance. You may schedule critical emission-related maintenance on these components if you meet the following conditions:
- (1) You demonstrate that the maintenance is reasonably likely to be done at the recommended intervals on in-use engines. We will accept scheduled maintenance as reasonably likely to occur if you satisfy any of the following conditions:
- (i) You present data showing that, if a lack of maintenance increases emissions, it also unacceptably degrades the engine's performance.
- (ii) You present survey data showing that at least 80 percent of engines in the field get the maintenance you specify at the recommended intervals.
- (iii) You provide the maintenance free of charge and clearly say so in your maintenance instructions
- (iv) You otherwise show us that the maintenance is reasonably likely to be done at the recommended intervals.
- (2) You may not schedule critical emission-related maintenance more frequently than the following min-

imum intervals, except as specified in paragraphs (a)(3), (b) and (c) of this section:

- (i) For catalysts, fuel injectors, electronic control units, superchargers, and turbochargers: The useful life of the engine family.
- (ii) For gaseous fuel-system components (cleaning without disassembly only) and oxygen sensors: 2,500 hours.
- (3) If your engine family has an alternate useful life under §1048.101(g) that is shorter than the period specified in paragraph (a)(2)(ii) of this section, you may not schedule critical emission-related maintenance more frequently than the alternate useful life, except as specified in paragraph (c) of this section.
- (4) You may ask us to approve a maintenance interval shorter than that specified in paragraphs (a)(2) of this section. In your request you must describe the proposed maintenance step, recommend the maximum feasible interval for this maintenance, include your rationale with supporting evidence to support the need for the maintenance at the recommended interval. and demonstrate that the maintenance will be done at the recommended interval on in-use engines. In considering your request, we will evaluate the information you provide and any other available information to establish alternate specifications for maintenance intervals, if appropriate.
- (b) Recommended additional maintenance. You may recommend any additional amount of maintenance on the components listed in paragraph (a) of this section, as long as you state clearly that these maintenance steps are not necessary to keep the emission-related warranty valid. If operators do the maintenance specified in paragraph (a) of this section, but not the recommended additional maintenance, this does not allow you to disqualify those engines from in-use testing or deny a warranty claim. Do not take these maintenance steps during service accumulation on your emission-data engines.
- (c) Special maintenance. You may specify more frequent maintenance to address problems related to special situations, such as substandard fuel or

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atypical engine operation. For example, you may specify more frequent cleaning of fuel system components for engines you have reason to believe will be using fuel that causes substantially more engine performance problems than commercial fuels of the same type that are generally available across the United States. You must clearly state that this additional maintenance is associated with the special situation you are addressing. We may disapprove your maintenance instructions if we determine that you have specified special maintenance steps to address engine operation that is not atypical, or that the maintenance is unlikely to occur in use. If we determine that certain maintenance items do not qualify as special maintenance under this paragraph (c), you may identify this as recommended additional maintenance under paragraph (b) of this section.

(d) Noncritical emission-related maintenance. Subject to the provisions of this paragraph (d), you may schedule any amount of emission-related inspection or maintenance that is not covered by paragraph (a) of this section (i.e., maintenance that is neither explicitly identified as critical emission-related maintenance, nor that we approve as critical emission-related maintenance). Noncritical emission-related maintenance generally includes changing spark plugs, re-seating valves, or any other emission-related maintenance on the components we specify in 40 CFR part 1068, Appendix I that is not covered in paragraph (a) of this section. You must state in the owners manual that these steps are not necessary to keep the emission-related warranty valid. If operators fail to do this maintenance, this does not allow you to disqualify those engines from in-use testing or deny a warranty claim. Do not take these inspection or maintenance steps during service accumulation on your emission-data engines.

(e) Maintenance that is not emission-related. For maintenance unrelated to emission controls, you may schedule any amount of inspection or maintenance. You may also take these inspection or maintenance steps during service accumulation on your emission-data engines, as long as they are reasonable and technologically necessary.

This might include adding engine oil, changing air, fuel, or oil filters, servicing engine-cooling systems, and adjusting idle speed, governor, engine bolt torque, valve lash, or injector lash. You may perform this nonemission-related maintenance on emission-data engines at the least frequent intervals that you recommend to the ultimate purchaser (but not the intervals recommended for severe service).

- (f) Source of parts and repairs. State clearly on the first page of your written maintenance instructions that a repair shop or person of the owner's choosing may maintain, replace, or repair emission-control devices and systems. Your instructions may not require components or service identified by brand, trade, or corporate name. Also, do not directly or indirectly condition your warranty on a requirement that the engine be serviced by your franchised dealers or any other service establishments with which you have a commercial relationship. You may disregard the requirements in this paragraph (f) if you do one of two things:
- (1) Provide a component or service without charge under the purchase agreement.
- (2) Get us to waive this prohibition in the public's interest by convincing us the engine will work properly only with the identified component or service.
- (g) Payment for scheduled maintenance. Owners are responsible for properly maintaining their engines. This generally includes paying for scheduled maintenance. However, manufacturers must pay for scheduled maintenance during the useful life if it meets all the following criteria:
- (1) Each affected component was not in general use on similar engines before January 1, 2004.
- (2) The primary function of each affected component is to reduce emissions.
- (3) The cost of the scheduled maintenance is more than 2 percent of the price of the engine.
- (4) Failure to perform the maintenance would not cause clear problems that would significantly degrade the engine's performance.

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(h) Owners manual. Explain the owner's responsibility for proper maintenance in the owners manual.

[70 FR 40468, July 13, 2005, as amended at 73 FR 59233, Oct. 8, 2008; 75 FR 23021, Apr. 30, 2010]

# § 1048.130 What installation instructions must I give to equipment manufacturers?

- (a) If you sell an engine for someone else to install in a piece of nonroad equipment, give the engine installer instructions for installing it consistent with the requirements of this part. Include all information necessary to ensure that an engine will be installed in its certified configuration.
- (b) Make sure these instructions have the following information:
- (1) Include the heading: "Emission-related installation instructions".
- (2) State: "Failing to follow these instructions when installing a certified engine in a piece of nonroad equipment violates federal law (40 CFR 1068.105(b)), subject to fines or other penalties as described in the Clean Air Act.".
- (3) Describe the instructions needed to properly install the exhaust system and any other components. Include instructions consistent with the requirements of §1048.205(v).
- (4) Describe the steps needed to control evaporative emissions, as described in §§ 1048.105 and 1048.245.
- (5) Describe any necessary steps for installing the diagnostic system described in §1048.110.
- (6) Describe any limits on the range of applications needed to ensure that the engine operates consistently with your application for certification. For example, if your engines are certified only for constant-speed operation, tell equipment manufacturers not to install the engines in variable-speed applications. Also, if you need to avoid sustained high-load operation to meet the field-testing emission standards we specify in §1048.101(c) or to comply with the provisions of §1048.101(d), describe how the equipment manufacturer must properly size the engines for a given application.
- (7) Describe any other instructions to make sure the installed engine will operate according to design specifications

in your application for certification. This may include, for example, instructions for installing aftertreatment devices when installing the engines.

- (8) State: "If you install the engine in a way that makes the engine's emission control information label hard to read during normal engine maintenance, you must place a duplicate label on the equipment, as described in 40 CFR 1068.105.".
- (c) You do not need installation instructions for engines you install in your own equipment.
- (d) Provide instructions in writing or in an equivalent format. For example, you may post instructions on a publicly available Web site for downloading or printing. If you do not provide the instructions in writing, explain in your application for certification how you will ensure that each installer is informed of the installation requirements.

[67 FR 68347, Nov. 8, 2002, as amended at 70 FR 40469, July 13, 2005]

## § 1048.135 How must I label and identify the engines I produce?

- (a) Assign each engine a unique identification number and permanently affix, engrave, or stamp it on the engine in a legible way.
- (b) At the time of manufacture, affix a permanent and legible label identifying each engine. The label must be—
- (1) Attached in one piece so it is not removable without being destroyed or defaced.
- (2) Secured to a part of the engine needed for normal operation and not normally requiring replacement.
- (3) Durable and readable for the engine's entire life.
  - (4) Written in English.
- (c) The label must—
- (1) Include the heading "EMISSION CONTROL INFORMATION".
- (2) Include your full corporate name and trademark. You may identify another company and use its trademark instead of yours if you comply with the provisions of § 1048.635.
- (3) Include EPA's standardized designation for the engine family (and subfamily, where applicable).
- (4) State the engine's displacement (in liters); however, you may omit this from the label if all the engines in the